Contents of Volume 169, 1999

Adams NJ, Pinshow B, Gannes LZ, Biebach H: Body temperatures in free-flying pigeons 195
Akiyama R, Mitsubayashi H, Tazawa H, Burggren WW: Heart rate responses to altered ambient oxygen in early (days 3–9) chick embryos in the intact egg 85
Allenspach AL → Costanzo JP
Anstee JH → Hopkin RS
Arad Z → Korine C
Arthur P → Guppy M
Axtell MJ → Kunz TH

Baden SP → Holmes JM
Baustian MD, Beyenbach KW: Natriuretic peptides and the acclimation of aglomerular toadfish to hypo-osmotic media 507
Baxter RM → Brown CR
Beard LA → Taplin LE
Bech C, Østnes JE: Influence of body composition on the metabolic rate of nestling European shags (*Phalacrocorax aristotelis*) 263
Becker W → Weihrauch D
Bernier NJ, Gilmour KM, Takei Y, Perry SF: Cardiovascular control via angiotensin II and circulating catecholamines in the spiny dogfish, *Squalus acanthias* 237
Berry P → Noren DP
Beyenbach KW → Baustian MD
Bicer E → Kunz TH
Biebach H → Adams NJ
Boll M → Winckler C
Borgwardt N, Culik BM: Asian small-clawed otters (*Amblonyx cinerea*): resting and swimming metabolic rates 100
Bowen WD → Mellish JE
Bowler K → Hopkin RS
Bradshaw FJ → Bradshaw SD
Bradshaw SD → Moro D
Bradshaw SD, Bradshaw FJ: Field energetics and the estimation of pollen and nectar intake in the marsupial honey possum, *Tarsipes rostratus*, in heathland habitats of South-Western Australia 569
Breves G → Schröder B
Breves G → Winckler C
Brix O, Clements KD, Wells RMG: Haemoglobin components and oxygen transport in relation to habitat distribution in triplefin fishes (Tripterygiidae) 329
Brown CR, Everitt VJ, Baxter RM: Comparative metabolism, thermoregulation and morphology in two populations of vlei rats (*Otomys irroratus*) 19
Brown CR → Peinke DM
Burggren WW → Akiyama R
Butler DG: Osmoregulation in North American eels (*Anguilla rostrata* LeSueur) on land and in freshwater: effects of the corpuscles of Stannius 139
Butler E → Noren DP

Cavey MJ → Yazawa T
Chelazzi G → De Pirro M
Claridge AW, Trappe JM, Cork SJ, Claridge DL: Mycophagy by small mammals in the coniferous forests of North America: nutritional value of sporocarps of *Rhizopogon vinicolor*, a common hypogeous fungus 172
Claridge DL → Claridge AW
Clauss W → Heinke B
Clements KD → Brix O
Coburn DK → Geiser F
Cork SJ → Claridge AW
Cortés-Rivera M → Rogowitz GL
Costanzo JP, Allenspach AL, Lee Jr RE: Electrophysiological and ultrastructural correlates of cryoinjury in sciatic nerve of the freeze-tolerant wood frog, *Rana sylvatica* 351
Costanzo JP → Holmstrup M
Couture P → Garenc C
Cox TC: Calcium and ATP regulation of ion transport in larval frog skin 344
Crailsheim K → Naiem E-S
Crocker CE, Ultsch GR, Jackson DC: The physiology of diving in a north-temperate and three tropical turtle species 249
Culik BM → Borgwardt N

Daniel H → Winckler C
De Pirro M, Santini G, Chelazzi G: Cardiac responses to salinity variations in two differently zoned Mediterranean limpets 501
Delorme M, Thomas DW: Comparative analysis of the digestive efficiency and nitrogen and energy requirements of the phyllostomid fruit-bat (*Artibeus jamaicensis*) and the pteropodid fruit-bat (*Rousettus aegyptiacus*) 123
Denaro MG → Trischitta F
Dontsov AE, Fedorovich IB, Lindström M, Ostrovsky MA: Comparative study of spectral and antioxidant properties of pigments from the eyes of two *Mysis relicta* (Crustacea, Mysidacea) populations, with different light damage resistance 157

Else PL, Wu BJ: What role for membranes in determining the higher sodium pump molecular activity of mammals compared to ectotherms? 296
Everitt VJ → Brown CR

Faggio C → Trischitta F
Fedorovich IB → Dontsov AE
Ferguson EA → Hogstrand C
Fock U, Hinssen H: Identification and localisation of nebulin as a thin filament component of invertebrate chordate muscles 555
Franklin CE → Wilson RS
Fuchs S → Hepburn HR
Fuglei E, Øritsland NA: Seasonal trends in body mass, food intake and resting metabolic rate, and induction of metabolic depression in arctic foxes (*Alopex lagopus*) at Svalbard 361
Fuller A, Mitchell G, Mitchell D: Non-thermal signals govern selective brain cooling in pigs 605

Galvez F → Hogstrand C
Gannes LZ → Adams NJ
Garenc C, Couture P, Laflamme M-A, Guderley H: Metabolic correlates of burst swimming capacity of juvenile and adult threespine stickleback (*Gasterosteus aculeatus*) 113
Garton DW → Hsu MJ
Geiser F, Coburn DK: Field metabolic rates and water uptake in the blossom-bat *Syconycteris australis* (Megachiroptera) 133
Geiser F → Lovegrove BG
Gesser H → Jensen MA
Giladi I, Pinshow B: Evaporative and excretory water loss during free flight in pigeons 311
Gilmour KM → Bernier NJ
Gräns AS → Holmes JM
Greenway SC, Storey KB: Discordant responses of mitogen-activated protein kinases to anoxia and freezing exposures in hatchling turtles 521
Grigg GC → Taplin LE
Guderley H → Garenc C
Guderley H, Pierre JS: Seasonal cycles of mitochondrial ADP sensitivity and oxidative capacities in trout oxidative muscle 474

Guppy M, Hill DJ, Arthur P, Rowley AF: Differences in fuel utilization between trout and human thrombocytes in physiological media 515

Hagerman L, Vismann B: Effects of thiosulphate on haemocyanin oxygen affinity in the isopod *Saduria entomon* (L.) and the brown shrimp *Crangon crangon* (L.) 549
Hammill MO → Mellish JE
Handrich Y → Thouzeau C
Harder JD → Hsu MJ
Hardewig I, Peck LS, Pörtner HO: Thermal sensitivity of mitochondrial function in the Antarctic Notothenioid *Lepidonotothen nudifrons* 597
Harrington WR → Kunz TH
Heinke B, Clauss W: Potassium conductances in isolated single cells from *Xenopus laevis* colonic epithelium 148
Hepburn HR, Radloff SE, Fuchs S: Flight machinery dimensions of honeybees, *Apis mellifera* 107
Hill DJ → Guppy M
Hinssen H → Fock U
Hogstrand C, Ferguson EA, Galvez F, Shaw JR, Webb NA, Wood CM: Physiology of acute silver toxicity in the starry flounder (*Platichthys stellatus*) in seawater 461
Holmes JM, Gräns AS, Neil DM, Baden SP: The effects of the metal ions Mn^{2+} and Co^{2+} on muscle contraction in the Norway lobster *Nephrops norvegicus* (L.) 402
Holmstrup M, Costanzo JP, Lee Jr RE: Cryoprotective and osmotic responses to cold acclimation and freezing in freeze-tolerant and freeze-intolerant earthworms 207
Hood WR → Kunz TH
Hopkin RS, Anstee JH, Bowler K: An investigation into the effects of stimulators of fluid production on *Locusta* Malpighian tubule intracellular elemental composition 429
Hrassnigg N → Naiem E-S
Hsu MJ, Garton DW, Harder JD: Energetics of offspring production: a comparison of a marsupial (*Monodelphis domestica*) and a eutherian (*Mesocricetus auratus*) 67
Huddart H → Wright TJ
Hume ID → McClelland KL

Iverson SJ → Mellish JE

Jackson DC → Crocker CE
James RS → Navas CA
Jensen MA, Gesser H: Influence of inorganic phosphate and energy state on force in skinned cardiac muscle from freshwater turtle and rainbow trout 439
Johnston IA → Navas CA
Johnston IA → Wakeling JM
Julio AE → Perry SF

Kemp KM → Navas CA
Kitaysky AS, Piatt JF, Wingfield JC, Romano M: The adrenocortical stress-response of Black-legged Kittiwake chicks in relation to dietary restrictions 303
Korine C, Zinder O, Arad Z: Diurnal and seasonal changes in blood composition of the free-living Egyptian fruit bat (*Rousettus aegyptiacus*) 280
Körtner G → Lovegrove BG
Kristiansen E, Pedersen S, Ramløv H, Zachariassen KE: Antifreeze activity in the cerambycid beetle *Rhagium inquisitor* 55
Kunz TH, Bicer E, Hood WR, Axtell MJ, Harrington WR, Silvia BA, Widmaier EP: Plasma leptin decreases during lactation in insectivorous bats 61
Kuo CM, Yang YH: Hyperglycemic responses to cold shock in the freshwater giant prawn, *Macrobrachium rosenbergii* 49
Kynard B → Leonard JBK

Laflamme M-A → Garenc C
Lawes MJ → Lovegrove BG
Le Maho Y → Thouzeau C
Lee Jr RE → Costanzo JP
Lee Jr RE → Holmstrup M
Lehmann F-O: Ambient temperature affects free-flight performance in the fruit fly *Drosophila melanogaster* 165
Leonard JBK, Norieka JF, Kynard B, McCormick SD: Metabolic rates in an anadromous clupeid, the American shad (*Alosa sapidissima*) 287
Lindström M → Dontsov AE
Liu J → Wang D
Lotz CN, Nicolson SW: Energy and water balance in the lesser double-collared sunbird (*Nectarinia chalybea*) feeding on different nectar concentrations 200
Lovegrove BG, Körtner G, Geiser F: The energetic cost of arousal from torpor in the marsupial *Sminthopsis macroura*: benefits of summer ambient temperature cycles 11
Lovegrove BG, Lawes MJ, Roxburgh L: Confirmation of pleisiomorphic daily torpor in mammals: the round-eared elephant shrew *Macroscelides proboscideus* (Macroscelidea) 453
Luck-Kopp S → Weihrauch D

McCartney RJ → Thompson MB
McClelland KL, Hume ID, Soran N: Responses of the digestive tract of the omnivorous northern brown bandicoot, *Isoodon macrourus* (Marsupialia: Peramelidae), to plant- and insect-containing diets 411
McCormick SD → Leonard JBK
Mellish JE, Iverson SJ, Bowen WD, Hammill MO: Fat transfer and energetics during lactation in the hooded seal: the roles of tissue lipoprotein lipase in milk fat secretion and pup blubber deposition 377
Mitchell D → Fuller A
Mitchell G → Fuller A
Mitsubayashi H → Akiyama R
Montpetit CJ → Perry SF
Moore K → Perry SF
Moro D, Bradshaw SD: Water and sodium requirements of field populations of house mice (*Mus domesticus*) and short-tailed mice (*Leggadina lakedownensis*) on Thevenard Island, in the arid Pilbara region of Western Australia 419
Moro D, Bradshaw SD: Water and sodium balances and metabolic physiology of house mice (*Mus domesticus*) and short-tailed mice (*Leggadina lakedownensis*) under laboratory conditions 538

Naiem E-S, Hrassnigg N, Crailsheim K: Nurse bees support the physiological development of young bees (*Apis mellifera* L.) 271
Navas CA, James RS, Wakeling JM, Kemp KM, Johnston IA: An integrative study of the temperature dependence of whole animal and muscle performance during jumping and swimming in the frog *Rana temporaria* 588
Neil DM → Holmes JM
Nicolson SW → Lotz CN
Nieves-Puigdoller K → Rogowitz GL
Noren DP, Williams TM, Berry P, Butler E: Thermoregulation during swimming and diving in bottlenose dolphins, *Tursiops truncatus* 93
Norieka JF → Leonard JBK

Øritsland NA → Fuglei E
Østnes JE → Bech C
Ostrovsky MA → Dontsov AE

Pearson JT, Tazawa H: Ontogeny of heart rate in embryonic and nestling crows (*Corvus corone* and *Corvus macrorhynchos*) 256
Peck LS → Hardewig I
Pedersen S → Kristiansen E
Peinke DM, Brown CR: Osmoregulation and water balance in the springhare (*Pedetes capensis*) 1
Perry SF → Bernier NJ
Perry SF, Montpetit CJ, Julio AE, Moore K: The influence of chronic anaemia on catecholamine secretion in the rainbow trout (*Oncorhynchus mykiss*) 335
Piatt JF → Kitaysky AS
Pierre JS → Guderley H
Pinshow B → Adams NJ
Pinshow B → Giladi I
Pörtner HO → Hardewig I
Postel U → Weihrauch D
Pulsford T → Taplin LE

Radloff SE → Hepburn HR
Ramløv H: Microclimate and variations in haemolymph composition in the freezing-tolerant New Zealand alpine weta *Hemideina maori* Hutton (Orthoptera: Stenopelmatidae) 224
Ramløv H → Kristiansen E
Redman P, Selman C, Speakman JR: Male short-tailed field voles (*Microtus agrestis*) build better insulated nests than females 581
Robin J-P → Thouzeau C

Rogowitz GL, Cortés-Rivera M, Nieves-Puigdoller K: Water loss, cutaneous resistance, and effects of dehydration on locomotion of *Eleutherodactylus* frogs 179
Romano M → Kitaysky AS
Rowley AF → Guppy M
Roxburgh L → Lovegrove BG
Russell KJ → Thompson MB

Santini G → De Pirro M
Schröder B, Vössing S, Breves G: In vitro studies on active calcium absorption from ovine rumen 487
Selman C → Redman P
Shaw JR → Hogstrand C
Siebers D → Weihrauch D
Silvia BA → Kunz TH
Soran N → McClelland KL
Speake BK → Thompson MB
Speakman JR → Redman P
Speakman JR → Thomson SC
Stewart JR → Thompson MB
Stiffler DF → Zerella MJ
Storey KB → Greenway SC
Sun R → Wang D

Takei Y → Bernier NJ
Taplin LE, Grigg GC, Beard LA, Pulsford T: Osmoregulatory mechanisms of the Australian freshwater crocodile, *Crocodylus johnstoni*, in freshwater and estuarine habitats 215
Tazawa H → Akiyama R
Tazawa H → Pearson JT
ter Keurs HEDJ → Yazawa T
Thomas DW → Delorme M
Thompson MB, Stewart JR, Speake BK, Russell KJ, McCartney RJ: Placental transfer of nutrients during gestation in the viviparous lizard, *Pseudemoia spenceri* 319
Thomson SC, Speakman JR: Absorption of visible spectrum radiation by the wing membranes of living pteropodid bats 187
Thouzeau C, Robin J-P, Le Maho Y, Handrich Y: Body reserve dynamics and energetics of barn owls during fasting in the cold 612
Trappe JM → Claridge AW
Trischitta F, Denaro MG, Faggio C: Effects of acetylcholine, serotonin and noradrenalin on ion transport in the middle and posterior part of *Anguilla anguilla* intestine 370

Ultsch GR → Crocker CE

Vismann B → Hagerman L
Voigt CC, Winter Y: Energetic cost of hovering flight in nectar-feeding bats (Phyllostomidae: Glossophaginae) and its scaling in moths, birds and bats 38
Vössing S → Schröder B

Wakeling JM, Johnston IA: Predicting muscle force generation during fast-starts for the common carp *Cyprinus carpio* 391
Wakeling JM → Navas CA
Wang D, Sun R, Wang Z, Liu J: Effects of temperature and photoperiod on thermogenesis in plateau pikas (*Ochotona curzoniae*) and root voles (*Microtus oeconomus*) 77
Wang Z → Wang D
Webb NA → Hogstrand C
Weihrauch D, Becker W, Postel U, Luck-Kopp S, Siebers D: Potential of active excretion of ammonia in three different haline species of crabs 25
Wells RMG → Brix O
Widmaier EP → Kunz TH
Wilkens JL → Yazawa T
Williams TM → Noren DP
Wilson RS, Franklin CE: Thermal acclimation of locomotor performance in tadpoles of the frog *Limnodynastes peronii* 445
Winckler C, Breves G, Boll M, Daniel H: Characteristics of dipeptide transport in pig jejunum in vitro 495
Wingfield JC → Kitaysky AS
Winter Y → Voigt CC
Wood CM → Hogstrand C
Wright TJ, Huddart H: Electrophysiological and pharmacological characteristics of buccal smooth muscle of the pest slug *Deroceras reticulatum* 561
Wu BJ → Else PL

Yang YH → Kuo CM
Yazawa T, Wilkens JL, ter Keurs HEDJ, Cavey MJ: Structure and contractile properties of the ostial muscle (musculus orbicularis ostii) in the heart of the American lobster 529

Zachariassen KE → Kristiansen E
Zerella MJ, Stiffler DF: Active transport of Calcium ions in the skin of the salamander *Ambystoma tigrinum* 481
Zinder O → Korine C

Erratum 236